

AMENDMENTS TO THE CLAIMS

This listing of claim will replace all prior versions and listings of claim in the application.

1.-79. (canceled)

80. (previously presented) A synchronizer provided on a network coupled processing device comprising:

computer code for comparing at least one file on the personal computer and a record of the file on the computer, and providing binary differencing data between the file and the record of the file; and

a transaction generator providing at least one binary difference transaction including said binary differencing data to an output.

81. (previously presented) The synchronizer of claim 80 wherein the output is coupled to a network, and the synchronizer is operatively coupled to at least one storage server via the network, the storage server receiving said difference transaction from said synchronizer.

82. (previously presented) The synchronizer of claim 81 wherein the synchronizer receives at least one binary difference transaction from the storage server, and further including computer code for applying the received difference transaction to the at least one file on the device.

83. (previously presented) The synchronizer of claim 82 wherein the synchronizer includes code for updating the record of the file on the device subsequent to applying the received difference transaction.

84. (previously presented) The synchronizer of claim 80 wherein the output 1 is coupled to a second synchronizer and the binary difference transaction is provided to said second synchronizer.

85. (previously presented) The synchronizer of claim 84 wherein the second

synchronizer is on said device.

86. (previously presented) The synchronizer of claim 84 wherein the second synchronizer is coupled to a network, and the output of the transaction generator is coupled to the network and the second synchronizer.

87. (previously presented) The synchronizer of claim 80 wherein the output is coupled to a network and the synchronizer is operatively coupled to at least one storage server via the network receiving said difference transaction from said synchronizer via the network, and the second synchronizer is coupled to the storage server.

88. (previously presented) The synchronizer of claim 80 wherein the synchronizer further includes an encryption routine encrypting the difference transaction.

89. (previously presented) The synchronizer of claim 80 wherein the synchronizer further includes a compression routine.

90. (previously presented) The synchronizer of claim 80 wherein the computer code for comparing at least one file on the personal computer includes Xdelta.

91. (previously presented) An article of manufacture, comprising:  
a nonvolatile storage apparatus including computer code, the computer code including:  
an application data access routine;  
a differencing transaction generator including binary difference data extractor;  
a user interface; and  
a network transfer routine.

92. (previously presented) The article of manufacture of claim 91 wherein the nonvolatile storage apparatus is a local storage device in a computer.

93. (previously presented) The article of manufacture of claim 91 wherein the

nonvolatile storage apparatus comprises a network storage apparatus.

94. (previously presented) The article of manufacture of claim 91 wherein the computer code is provided in an installation package further including an installation routine.

95. (previously presented) The article of manufacture of claim 91 wherein the differencing transaction generator determined difference data based on comparing at least one file to a record of said at least one file.

96. (previously presented) The article of manufacture of claim 95 wherein the differencing transaction generator outputs instructions to add, delete or modify the file based on the difference data extracted.

97. (previously presented) The article of manufacture of claim 91 wherein the binary difference data extractor comprises Xdelta.

98. (previously presented) The article of manufacture of claim 91 further including an encoder routine operable on said differencing transaction.

99. (previously presented) The article of manufacture of claim 91 further including an compression routine operable on said differencing transaction.

100. (previously presented) An installation package transmittable over a network connection, comprising:

    a system installation routine;

    a binary difference transaction generator, the binary difference transaction including a binary difference comparison between a first file and a previous version of said first file; and

    a network coupling routine.

101. (previously presented) The installation package of claim 100 wherein the installation routine is determined based on a type of device for which the installation package is

intended.

102. (previously presented) The installation package of claim 100 wherein the application data access routine includes a file system access routine.

103. (previously presented) The installation package of claim 100 further including an encoder.

104. (previously presented) The installation package of claim 100 further including a compression routine.

105. (previously presented) The installation package of claim 100 wherein the installation package is accessible via the World Wide Web.

106. (previously presented) The installation package of claim 100 provided on a nonvolatile storage medium.

107. (previously presented) The installation package of claim 106 wherein the nonvolatile storage medium is a local storage device in a network coupled processing device.

108. (previously presented) The installation package of claim 106 wherein the nonvolatile storage medium is a network storage server.

109. (previously presented) A synchronizer provided on a network coupled server, comprising:

computer code for comparing at least one file on a network coupled device in communication with the network coupled server and extracting binary differencing data representing the difference between the file and a record of the file; and

a transaction generator providing at least one transaction including said binary differencing data to an output.

110. (previously presented) The synchronizer of claim 109 wherein the record of the

file is provided on the network coupled device.

111. (previously presented) The synchronizer of claim 109 wherein the record of the file is provided on the network coupled server.

112. (previously presented) The synchronizer of claim 109 wherein the record of the file is a previous version in time of the file.

113. (previously presented) The synchronizer of claim 109 wherein the synchronizer further includes application code to modify a second version of the file by applying said binary differencing data to the second version of the file.

114. (previously presented) The synchronizer of claim 113 wherein the second version of the file is on a second network coupled device.

115. (previously presented) The synchronizer of claim 113 wherein the second version of the file is on the network coupled server.

116. (previously presented) A binary differencing synchronization system, comprising:  
at least a first binary differencing engine coupled to a first network coupled device;  
at least a second binary differencing engine coupled to a second network coupled device; and  
a storage device coupled to the first and the second network coupled devices storing binary differencing data from and outputting binary differencing data to said at least first and second binary differencing engines.